

means on the biota. Subsidiy of abundance in specific invertebrate populations is typical of certain stressors; consequently, both the population's abundance and corresponding information regarding the potential stressor were closely considered. Finally, threshold values for some potential stressors were determined via abundance scatter plots versus more qualitative information. Evaluations of pre-TMDL monitoring information on algal density are one such example.

**Table 2-1. Stressor identification analysis thresholds**

Candidate Cause	Parameter	Elimination (Rule out stressors at these thresholds)	Strength of Evidence (Evidence for each Candidate Cause as stressor)	
		Elimination Threshold	Candidate Stressor Thresholds	
1. Metals toxicity	Al (dissolved)	<0.1049 mg/L	>0.442 mg/L	Definite Stressor
			0.307 - 0.4419	Likely stressor
			0.227 - 0.3069	Possible stressor
			0.182 - 0.2269	Weak stressor
			0.105 - 0.1819	Equivocal or No Trend
	Fe (total)		Fe toxicity to benthic invertebrates is not well established.	
	Mn (total)		Mn toxicity to benthic invertebrates is not well established.	
2. Acidity	pH	>6.3	<4.29	Definite Stressor
			4.99-4.3	Likely stressor
			5.29-5.0	Possible stressor
			6.59-5.3	Weak stressor
			6.29-6.0	Equivocal or No Trend
3. High pH	pH	< 8.39	>9.1	Definite Stressor
			8.9-9.09	Likely stressor
			8.8-8.89	Possible stressor
			8.7-8.79	Weak stressor
			8.4-8.69	Equivocal or No Trend
			<8.39	Eliminated from stressor possibility
4. Ionic strength	Conductivity	< 326.9 umhos	Consider as independent stressor in non-acidic, non-AMD streams, when conductivity values met threshold ranges and sulfates and chloride violate conditions listed as follows.	
			>1533	Definite Stressor
			1075-1532.9	Likely stressor
			767-1074.9	Possible stressor
			517-766.9	Weak stressor
			327-516.9	Equivocal or No Trend
	Sulfates	< 56.9 mg/l	>417	Definite Stressor
			290-416.9	Likely stressor
			202-289.9	Possible stressor
			120-201.9	Weak stressor
			57-119.9	Equivocal or No Trend
	Chloride	< 60 mg/l	>230.0	Definite Stressor
			160.1-229.9	Likely stressor
			125.1-160	Possible stressor
			80.1-125.0	Weak stressor
			60.1-80.0	Equivocal or No Trend